A003 - Configuration Management Plan Coversheet

System:	***Item Number:*** A003

Title:

Configuration Management Plan

RFP Reference:

Section VI Part 3, O.1

Date of Submission:

- Ten (30) days after the Contractor starts work
- If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within 10 days.
- Updates: The plan shall be updated to track all subsequent changes to management of the project. The plan shall be maintained current to within 22 days of any change (unless otherwise specified and agreed.)

Distribution:

- CDCR: 2 copies along with a magnetic media containing MS Office format copy
- V&V: 1 copy along with a magnetic media containing MS Office format copy

Approval:

CDCR written approval is required.

Comment:

Change pages may be delivered upon approval of changes to the requirements until the cumulative total number of change pages reaches 10% of the final submission, upon which the entire document shall be re-issued.

Preparation Instructions:

The Contractor shall provide this document according to the standards defined in the documentation plan.

The deliverable(s) shall include at a minimum the contents of the template in and/or following this coversheet, or equivalent as determined by the Project Director or designee. Providing less information than required in the template or any exceptions shall not be allowed unless advance written permission is obtained from the Project Director or designee.

Configuration Management Plan Template

1.0 INTRODUCTION

1.1 Scope

Include a full identification of the system to which this document applies and define the boundaries of the configuration management effort. Describe how the project's technical products will be identified and managed, and explain how changes to those products will be controlled, coordinated, and approved; how conformance to requirements will be audited, and how the status of configuration items will be reported.

1.2 Purpose

Briefly state the purpose of the system to which this document applies. Describe the general nature of the system; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

2.0 REFERENCE

2.1. Compliance Documents

List all State, Departmental, and any other mandated directives, policies, and manuals being used for configuration management planning.

2.2 Other Documents

List any supporting documents that are relevant to configuration management.

3.0 ORGANIZATION

3.1 Organization Roles and Responsibilities

Describe the structure of the organization(s) who will fulfill and ensure compliance with the configuration management requirements. Include the authority and responsibilities of each organization and its relationship to other organizational entities. Indicate who has the authority to perform the following: originate changes; review changes; approve changes; administer the change process; validate the changes; verify change completion; and release any software, data, or documents. Identify who has the authority to override normal CM procedures during emergency situations and how those overrides will be reconciled with the product baselines.

Explain the role of the project's Change Control Board (CCB), and describe how the CCB will function. Define the authority and the makeup of the CCB. Identify members by name and position. State how changes to the CCB membership will be made known. Describe the relationship between the project CCB, any higher level CCBs, and any other organization involved in configuration management.

3.2 Individual Roles and Responsibilities

List the personnel classification roles of the individuals who will perform configuration management activities. A key role will be the Configuration Manager whose authority must be sufficient enough to ensure that unauthorized changes do not take place. Identify the personnel associated with the roles (there may be more than one individual for any given role), and the responsibilities associated with each role. Indicate who is responsible for the following activities: ensuring the integrity of the software system; maintaining physical custody of the product baselines; performing product audits; managing the library; developing and maintaining specialized configuration management tools; and overriding normal configuration management procedures during exceptional situations. Explain who will reconcile overrides with the product baselines and how they will do so that inconsistencies and lost updates do not occur. Include an organizational chart showing the identified personnel, if possible.

3.3 Interface Control

Describe the methods that will be used for the functions involving interfaces. Include all types of interfaces such as those among organizational elements, software modules, and between hardware and software. Identify all interface specifications and control documents. Describe the method used to manage changes to interface specifications and related documents. Describe how the configuration management process will ensure changes to interface specifications are accomplished. Describe how the status of interface specifications and documents will be maintained.

3.4 Configuration Management Plan Milestones

List the milestones for the major configuration management activities. At a minimum, these should include:

- Establishment of the CCB;
- Establishment of the requirements baseline;
- Establishment of the design baseline;
- Establishment of the test baseline;
- Establishment of the implementation baseline;
- Requirements review;
- Critical Design review;
- Development review;
- Test readiness review;
- System readiness review;
- Configuration Audits, including both functional and physical.

4.0 CONFIGURATION IDENTIFICATION ACTIVITIES

4.1 Configuration Item Definition

Describe the process for selecting items to be placed under configuration control. Items may include the following: management plan and other management documents; specifications, such as requirements and design specifications; user documentation; test designs, test cases, and test procedure specifications; test data and test generation procedures; support software; data dictionaries; design graphics; source, object, and executable code; software libraries; databases; build instructions; installation procedures; and installation configuration tables. Support software shall include any language translators, operating systems, loaders, debuggers, and other support software. Other hardware related configuration items shall include, but not be limited to, standards and configuration for equipment, communications, security, and safety standards, and tools, training items, manuals, and scripts created for the project. In addition, standard identification procedures must be identified for: standard labels for products, identification of the hierarchical structure of computer programs, component and unit naming conventions, numbering or version level designations media identification methods, database identification methods, and documentation labeling and identification methods. Global configuration items (items used by more than one project) must be identified.

4.2 Configuration Item Documentation

Describe the nature of configuration documentation required for each configuration item. Identify the type of information required for each item, such as name, description, internal and external interfaces, and functional and physical attributes; describe nomenclature and numbering schema to be used.

4.3 Establish Baselines

Explain the process for establishing and approving the formal baselines of configuration items. Identify the process for documenting the formal baselines, and explain the procedures for controlling configuration items at the baseline level.

5.0 CONFIGURATION CONTROL ACTIVITIES

5.1 Change Control Process

Define the procedures necessary to implement changes to any configuration item baseline. The procedures should describe a systematic process for evaluating, coordinating, and deciding on the nature of proposed changes to the baseline, and for tracking the implementation of those approved changes to the established baseline and the associated documentation. Describe the level of authority required to approve changes. Identify the Change Control Board's (CCB) level of authority and responsibility in this process. Identify the authority of the configuration manager, and explain the procedures to be used by the configuration manager to oversee changes authorized by the CCB. The contractor shall obtain the approval of the Information Systems Division's CCB prior to the implementation of statewide production. Changes to Global configuration items must be coordinated and approved by the Information Systems Division CCB. Emergency procedures must also be defined.

5.2 Configuration Management Documentation

Identify the required documentation associated with the change control process. Explain the use of the forms, and identify the information that will be required as part of a change request. Describe the process for logging and tracking change requests. If the process changes for different life cycle phases, include the changes and routing instructions.

5.3 Configuration Management Library

Explain the plan for establishing a configuration management library as a method to securely store configuration items. Identify the process for software library control including access control, read and write protection, configuration item protection, archive maintenance, change history, and disaster recovery. Describe the processes for identifying all items in the library, documenting the location and contents of each configuration item, and establishing the procedures for retrieving items from the library. Also include control procedures for non-released software, off-the-shelf software, and other special software products.

6.0 CONFIGURATION STATUS AND ACCOUNTING ACTIVITIES

6.1 Status Accounting

Maintain status accounting so that a continuous record of the status of all baselines is kept. Describe the process for documenting change requests. Include the status of proposed changes and the implementation status of approved changes. Describe how information on the status of the various configuration item baselines will be collected, verified, stored, linked, and reported. Describe the accounting process of keeping records of the other configuration management activities: configuration identification, configuration control, and configuration auditing.

6.2 Status Reporting

Identify the configuration status reports and records that will be generated during the project. Indicate the frequency of each report, identify the individual(s) responsible generating the reports, and explain the method of distribution of each report. Reports must include tracking problem reports. Identify what information must be available for status reports. Explain the intended audience for each report as well as the content and format.

7.0 CONFIGURATION AUDIT AND REVIEW ACTIVITIES

7.1 Establish Audit/Review Criteria

Identify and document the criteria to be used during an audit or review. Indicate the frequency of the audits/reviews, establish rules of conduct, and identify who will participate, as well as their roles and responsibilities. Identify which configuration items will be covered by each review and audit. State the procedures to be used for identifying and resolving problems that are discovered in reviews and audits.

7.2 Conduct Audit/Review

Describe the process to conduct a verification and validation audit/review. Explain how the configuration item baselines will be scrutinized against the audit criteria.

Explain what information related to the audit/review outcome will be documented and maintained.

7.3 Audit/Review Follow-up

Describe the process for verifying and validating whether the proposed configuration is complete and consistent. Describe how action items resulting form the audit will be tracked. Document the process for monitoring action items, and explain the requirements for completing an audit.

8.0 RELEASE PROCEDURES

State procedures for the release of configuration item baselines into production.

9.0 TOOLS, TECHNIQUES AND METHODOLOGIES

Include name, description, function, and procedures for any automated configuration management tools here.

10.0 SUPPLIER CONTROL

If subcontractors must adhere to the same configuration management as the project, state that fact here. Include any subcontractor or vendor provided software.

11.0 RECORDS RETENTION AND COLLECTION

Include plans to retain and safeguard formal documentation for a selected timeframe.

Appendixes X

Label appendices alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The IT project should use as many appendices as is reasonable and makes sense for the deliverable.